

U.S. Patent Application No. 09/995,888
Amendment dated September 8, 2004
Reply to Office Action dated June 28, 2004

REMARKS/ARGUMENTS

Reconsideration and continued examination of the above-identified application are respectfully requested.

Claims 1-40 are pending in the application. The amendment to the claims, including new claims 31-40, further defines what the applicant regards as the invention and are not made in response to any rejection. Full support for the amendment can be found in the specification as originally filed, for instance, at page 12, lines 1-4 and lines 13-17, page 13, lines 15-18, page 15, lines 4-7, and in Figures 1-3 of the present application. Accordingly, no questions of new matter should arise and entry of the amendment is respectfully requested.

At page 2 of the Office Action, the Examiner rejects claims 1-10 under 35 U.S.C. §103(a) as being unpatentable over Jaffe (U.S. Patent No. 2,328,381). The Examiner asserts that Jaffe describes a filter cartridge assembly having a tubular housing (12) and a plurality of filter media sections. The Examiner also indicates that the first filter media section of Jaffe includes a length in a direction from the first end to the second end that includes at least portions of at least two of the lengths of the inner wall sections such that the first media section traverses at least one of the shoulders, and the filter chambers are in a gradually decreasing cross-section from the top to the bottom. Therefore, the Examiner concludes that it would have been obvious to a person having ordinary skill in the art, at the time the invention was made, to provide a gradually decreasing tubular housing as taught by Jaffe. For the following reasons, this rejection is respectfully traversed.

Claim 1 of the present application recites, in part, that at least one of the plurality of filter media sections has a length in a direction from the first end to the second end that includes at least portions of at least two of the lengths of the inner wall sections such that at least one of the plurality of filter media sections traverses at least one of the shoulders. For example, referring to Fig. 1,

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sections of various filter media are contained within the tubular housing (104). Preferably, at least one of the plurality of filter media sections spans a portion of at least two lengths of inner wall sections 110, 112, 114, 116, and 118 such that at least one of plurality of filter media sections traverses shoulder 120, 122, 124, or 126. In other words, at least one of plurality of filter media sections lies across the shoulder.

Neither the description nor the figures in Jaffe teach or suggest such an arrangement. In fact, Jaffe, at page 2, describes that screens 41, 42, 43, and 44 are resting on the shoulders formed between the successive chambers. Screens 41, 42, 43, and 44 serve to hold the filter and purifying media within the respective filter chambers. Therefore, it would be impossible for the filter and purifying media of Jaffe to include a length in a direction that includes at least portions of at least two of the lengths of the inner wall sections such that the filter or purifying media traverses at least one of the shoulders. It is important for the Examiner to appreciate that traverse is defined as "lie across," which, in Jaffe, the screens prevent the filter and/or purifying media to have such an arrangement. In fact, Jaffe specifically states that the purifying media are within the respective filter chambers.

With respect to claims 31-35, these claims are directly dependent on claim 1. Therefore, the reasons set forth above with respect to the patentability of claim 1 would also apply here. Furthermore, Jaffe only describes a cloth filtering pad and a carbonaceous filter material. Jaffe does not teach or suggest the filter media sections recited in claims 32-35. Accordingly, this rejection should be withdrawn.

At page 2 of the Office Action, the Examiner rejects claims 11-30 under 35 U.S.C. §103(a) as being unpatentable over Jaffe in view of Pyper (U.S. Patent No. 5,032,261). According to the Examiner, Pyper describes the "annual" flow director extending radially-inwardly from the inner

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wall of the tubular housing. Thus, the Examiner concludes that it would have been obvious to a person having ordinary skill in the art, at the time the invention was made, to provide an "annual" flow director (as taught by Pyper) in the filtering apparatus of Jaffe. The applicants believe the Examiner meant "annular" and not "annual." For the following reasons, this rejection is respectfully traversed.

Claim 11 recites, in part, a tubular housing having a conical shape and including a straight inner wall, wherein the inner wall includes at least a first section, a second section, and a third section, wherein the second average inner diameter is less than the first average inner diameter, and the third average inner diameter is less than the second average inner diameter.

The filtering systems of Jaffe and Pyper are very different from one another, and one skilled in the art would not be motivated to combine the two references. For instance, Jaffe describes a filter system having several chambers containing different filter and purifying media. In contrast, the filtering system of Pyper relates to a single filtering media which is sand or the like. Furthermore, the filter chambers of Jaffe include a progressively-decreasing diameter downwardly. In contrast, the filter of Pyper has a constant diameter throughout. Therefore, one skilled in the art, by reading Jaffe, would not be motivated to look to the filtering system of Pyper.

Furthermore, even if one skilled in art would combine the two references, the combination of the two references does not teach or suggest a tubular housing having a conical shape and including a straight inner wall. The cartridge in Jaffe includes shoulders that create a step-like structure in the filter cartridge, and the cartridge of Pyper includes a consistent diameter. Therefore, even if one skilled in the art would combine the two references, the combination of the two references does not teach or suggest a conical-shaped straight inner wall.

With respect to claims 36-45, these claims are directly dependent on claim 12 or claim 22.

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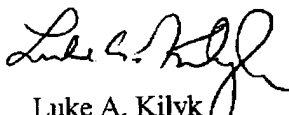
Therefore, the reasons set forth above with respect to the patentability of claim 12 or 22 would also apply here. Furthermore, the combination of Jaffe and Pyper does not teach or suggest the filter media sections recited in these claims. Accordingly, this rejection should be withdrawn.

CONCLUSION

In view of the foregoing remarks, the applicant respectfully requests the reconsideration of this application and the timely allowance of the pending claims.

If there are any other fees due in connection with the filing of this response, please charge the fees to Deposit Account No. 50-0925. If a fee is required for an extension of time under 37 C.F.R. § 1.136 not accounted for above, such extension is requested and should also be charged to said Deposit Account.

Respectfully submitted,


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